PARAM VIR SINGH
Carnegie Bosch Institute Junior Chair
Assistant Professor of Information Systems
Tepper School of Business
Carnegie Mellon University

August, 2012

EDUCATION

2008	PhD, Information Systems, Michael G. Foster School of Business, University of Washington, Seattle, WA.
2008	M.S. in Business Administration, Michael G. Foster School of Business, University of Washington, Seattle, WA.
2004	M.A. in Interdisciplinary Studies, Texas Tech University, Lubbock, TX.
2000	B.E. in Chemical Engineering, Department of Chemical Engineering and Technology, Panjab University, Chandigarh, India.

POSITIONS HELD

2008	Assistant Professor of Information Systems, Tepper School of Business, Carnegie Mellon University.

PUBLICATIONS

Articles in refereed journals (i.e., critical peer review before publication):

Yingda Lu, Kinshuk Jerath, Param Vir Singh. The Emergence of Opinion Leaders in a Networked Online Community: A Dyadic Model with Time Dynamics and a Heuristic for Fast Estimation, Forthcoming at *Management Science*.

Param Vir Singh, and Corey Phelps. Networks, Social Influence and the Choice Among Competing Innovations: Insights from Open Source Software Licenses, Forthcoming at *Information Systems Research*.

Nachiketa Sahoo, Param Vir Singh, and Tridas Mukhopadhyay. A Hidden Markov Model of Collaborative Filtering. Forthcoming at *Management Information Systems Quarterly*.

Rohit Aggarwal, Ram Gopal, Ramesh Sankaranarayanan, and Param Vir Singh. Blog, Blogger, and the Firm: Can Negative Posts by Employees Lead to Positive Outcomes. Forthcoming at *Information Systems Research,* (Available under online articles in advance).

Param Vir Singh, Yong Tan, and Nara Youn. A Hidden Markov Model of Developer Learning Dynamics in Open Source Software Projects. *Information Systems Research,* 2011**,** 22(4), 790-807.

Tridas Mukhopadhyay, Param Vir Singh, and Seung Hyun Kim. Learning Curves of Agents with Diverse Skills in Information Technology Enabled Physician Referral Systems. *Information Systems Research*, 2011, 22(3), 586-605.

Param Vir Singh, Yong Tan, and Vijay Mookerjee. Network Effects: The Influence of Structural Social Capital on Open Source Software Project Success. *Management Information Systems Quarterly,* 2011, 35(4), 813-829. (Appeared as lead research article).

Param Vir Singh. The Small World Effect: The Influence of Macro Level Properties of Developer Collaboration Networks on Open Source Project Success. *ACM Transactions of Software Engineering and Methodology,* 2010, 20 (2), 6:1-6:27.

Param Vir Singh and Yong Tan. Developer Heterogeneity and Formation of Communications Networks in Open Source Software Projects. *Journal of Management Information Systems,* 2010, 27(3) pp 179-210.

Articles in refereed conference proceedings:

Yan Huang, Param Vir Singh, and Tridas Mukhopadhyay (2012) Crowdsourcing Contests: A Dynamic Structural Model of the Impact of Incentive Structure on Solution

Quality, *International conference of Information Systems*, Orlando Florida. 2012.

Yan Huang, Param Vir Singh, and Kannan Srinivasan (2011) Crowdsourcing Blockbuster Ideas: A Dynamic Structural Model of Ideation, *Conference of Information Systems and Technology, Charlotte* 2011.

Yingda Lu, Param Vir Singh, and Kannan Srinivasan (2011) How to Retain Smart Customers in Crowdsourcing Efforts? A Dynamic Structural Analysis of Crowdsourcing Customer Support and Ideation, *Conference of Information Systems and Technology, Charlotte* 2011.

Yan Huang, Param Vir Singh, and Kannan Srinivasan (2011) Crowdsourcing Blockbuster Ideas: A Dynamic Structural Model of Ideation, *International Conference of Information Systems, Shanghai* 2011.

Yingda Lu, Param Vir Singh, and Baohong Sun (2011) Learning From Peers on Social Media Platforms, *International Conference of Information Systems, Shanghai* 2011.

Yingda Lu, Param Vir Singh, Kannan Srinivasan (2011) How to Retain Smart Customers in Crowdsourcing Efforts? A Dynamic Structural Analysis of Crowdsourcing Customer Support and Ideation, *Workshop on Information Systems and Technology, Shanghai* 2011.

Yan Huang, Param Vir Singh, and Kannan Srinivasan (2011) Crowdsourcing Blockbuster Ideas: A Dynamic Structural Model of Ideation, *Workshop on Information Systems Economics, Shanghai* 2011.

Yan Huang, Param Vir Singh, and Anindya Ghose (2010) An Empirical Analysis of Competitive Dynamics in Enterprise Social Media, *Workshop on Information Systems Economics, Saint Louis* 2010.

Param Vir Singh, Nachiketa Sahoo, and Tridas Mukhopadhyay (2010) Seeking Variety: A Dynamic Model of Employee Blog Reading Behavior, *Workshop on Information Systems Economics, Saint Louis* 2010.

Yan Huang, Param Vir Singh, and Anindya Ghose (2010) Show Me the Incentives: A Dynamic Structural Model of Employee Blogging Behavior, *International Conference of Information Systems, Saint Louis* 2010.

Yingda Lu, Param Vir Singh, Baohong Sun (2010) Blind Men Can Judge No Color: A Dynamic Structural Model of Enterprise Expertise Sharing, *Workshop on Information Systems and Technology, Saint Louis* 2010.

Yan Huang, Param Vir Singh, and Anindya Ghose (2010) Show Me the Incentives: A Dynamic Structural Model of Employee Blogging Behavior, *Conference on Information Systems and Technology, Austin* 2010.

Yingda Lu, Param Vir Singh, Baohong Sun (2010) Blind Men Can Judge No Color: A Dynamic Structural Model of Enterprise Expertise Sharing, *Conference on Information Systems and Technology, Austin* 2010.

Yingda Lu, Kinshuk Jerath, and Param Vir Singh. The Emergence of Opinion Leaders in Online Review Communities. *Statistical Challenges in Electronic Commerce Research* (SCECR), 2010, *Austin*, Texas.

Param Vir Singh, Nachiketa Sahoo, and Tridas Mukhopadhyay. Modeling Blog Reading Dynamics. *Statistical Challenges in Electronic Commerce Research* (SCECR), 2010, *Austin*, Texas.

Param Vir Singh, Nachiketa Sahoo, and Tridas Mukhopadhyay. Modeling Blog Reading Dynamics. *Utah Information Systems Winter Conference*, 2010, *Salt Lake City*, Utah.

Liye Ma, Param Vir Singh, and Michael Smith. No Meaningful Impact: The Effect of Pre-release Piracy on Movie Box Office Sales. Proceedings of *Workshop on Information Systems Economics* (WISE), 2009, *Phoenix*, Arizona.

Param Vir Singh, Ray Reagans, and Ramayya Krishnan. Forbidden to Simmelian Ties: Dynamics of Expertise Sharing Communities. Proceedings of *Workshop on Information in Networks* (WIN), 2009, *New York City*, New York.

Rob Schonlau and Param Vir Singh. Board Networks and Merger Performance. *Financial Management Association's Annual Meeting*, 2009, *Reno*, Nevada.

Liye Ma, Param Vir Singh, and Michael Smith. No Meaningful Impact: The Effect of Pre-release Piracy on Movie Box Office Sales. *Statistical Challenges in Electronic Commerce Research* (SCECR), 2009, *Pittsburgh*, Pennsylvania.

Param Vir Singh. Open Source Software and the Small World Phenomenon: An empirical Investigation of Macro Level Network Properties on Project Success, Proceedings of *International Conference on Information Systems* (ICIS), 2007, *Montreal*, Canada.

Param Vir Singh, Yong Tan, and Vijay Mookerjee. Social Capital, Structural Holes and Team Composition: Collaborative Networks of the Open Source Software Community, Proceedings of *International Conference on Information Systems* (ICIS), 2007, *Montreal*, Canada.

Param Vir Singh, Corey Phelps, Ming Fan, and Yong Tan. Determinants of Open Source Software Development License Choice: A Social Influence Perspective, Proceedings of *Workshop on Information Systems and Economics* (WISE), 2007, *Montreal*, Canada.

Param Vir Singh and Yong Tan. Planning to First Release: A Conditional Hazard Function Approach for Investigating Open Source Software Development Time, Proceedings of *Workshop on Information Technology and Systems* (WITS), 2006, *Milwaukee*, Wisconsin, pp 127-133.

Param Vir Singh and Yong Tan. Stability and Efficiency of Communications Networks in Open Source Software Development, Proceedings of *Workshop on Information Technology and Systems* (WITS), 2005, *Las Vegas*, Nevada, pp 177-182.

Param Vir Singh and Eric Walden, Flexibility and Cost in IT Outsourcing: Balancing Opposing Goals, Proceedings of the *Americas Conference on Information Systems*, *Tampa*, Florida, August 4-6, 2003, pp. 1653-1663. **Nominated for Best Paper Award.**

Articles in non-refereed proceedings:

Yan Huang, Param Vir Singh, and Kannan Srinivasan (2011) Crowdsourcing Blockbuster Ideas: A Dynamic Structural Model of Ideation, *Informs Marketing Science Conference, Boston* 2012.

Yan Huang, Param Vir Singh and Kannan Srinivasan, Crowdsourcing "Blockbuster" Ideas: A Dynamic Structural Model of Ideation, *INFORMS Annual Meeting* 2011, Charlotte, NC, November, 2011.

Yingda Lu, Param Vir Singh, and Baohong Sun. A Dynamic Structural Analysis of Enterprise Knowledge Sharing, *INFORMS Marketing Science Conference* 2011, Houston, Texas.

Yingda Lu, Kinshuk Jerath, and Param Vir Singh. Emergence of Opinion Leaders in Online Review Communities. *CORS Informs*, 2009, Toronto, Canada.

Yingda Lu, Kinshuk Jerath, and Param Vir Singh. Emergence of Opinion Leaders in Online Review Communities. *Informs Annual Meeting*, 2009, San Diego, California.

Param Vir Singh, Nara Youn, and Yong Tan. Developer Learning Dynamics in Open Source Software Projects: A Hidden Markov Modeling Approach. *Informs Marketing Science Conference*, Vancouver, British Columbia.

Param Vir Singh. Collaboration Software Development and the Small World Phenomenon, *Informs Annual Meeting*, 2007, Seattle, Washington.

NON-PUBLISHED PAPERS

Completed Working Papers:

A Structural Model of Employee Behavioral Dynamics in Enterprise Social Media, with Yan Huang and Anindya Ghose, *Under 3rd round of review at Management Science.*

Seeking Variety: A Dynamic Model of Employee Blog Reading Behavior, with Tridas Mukhopadhyay and Nachiketa Sahoo, *Under 2nd round of review at Information Systems Research.*

The Effect of Pre-release Movie Piracy on Box Office Revenue, with Liye Ma, Mike Smith, and Alan Montgomery, *Preparing for 2nd round of review at Information Systems Research.*

Learning from Peers on Social Media Platforms: A Dynamic Structural Model, with Yingda Lu and Baohong Sun. *Preparing for 2nd round of review at Journal of Marketing Research.*

Crowdsourcing New Product Ideas under Consumer Learning, with Yan Huang and Kannan Srinivasan. *Preparing for 2nd round of review at Management Science.*

Incentivizing Enterprise Social Media Participation under Employee Heterogeneity, with Nachiketa Sahoo and Tridas Mukhopadhyay. *Preparing for 2nd round of review at Information Systems Research.*

Learning to Cross Boundaries in Online Knowledge Communities: Fading of Surface-level and Rise of Deep-level Similarity with Experience, with Elina Hwang and Linda Argote. *Preparing for 2st round of review at Organization Science.*

Community Costs? Analyzing the Contingent Association Between Internal Cohesion and Relationships with Outsiders, with Ray Reagans and Ramayya Krishnan . *Under 1st round of review at Management Science.*

Media Mentions:

Yan Huang, Param Vir Singh, and Anindya Ghose (2011) A Structural Model of Employee Behavioral Dynamics in Enterprise Social Media.
Mentioned by:
(a) Susan Adams, "Personal Blogging at Work increases Productivity" March 1, 2011, Forbes.

(b) John Egen, "Blogging for Fun, Blogging for Work Should Harmonize in Corporate World" March 12, 2011, Technorati.
(c) David Spark, "Prohibiting leisure blogging of employees has a negative effect on productive blogging" Jan 20, 2011, Smart Blogs on Social Media.
(d) AACSB, "The Benefits of Blogging" BizED Magazine, 2011.
(e) Workplace HR and Safety HR, "Blogging and Employee Productivity" March 29, 2011, Open HR resources.
(f) Jason Hensel, "Blogging Helps Worker Productivity" April 29, 2011, PlusPoint.
(g) "Fun Blogging on Company Time" March 13, 2011, AU Social Media Class.
(h) "NYU Stern Releases Findings Showing Benefits of Blogging in the Workplace" March 3, 2011, Internet Business News.
(i) "Workplace Blogging" CMU Homepage Story on Global Society and Economy.
(j) "Blogging on Company Time? CMU-Led Research Shows Long-Term Organizational Benefits when Employees Blog at Work" March 18, 2011, CMU Heinz College Story.

Rohit Aggarwal, Ram Gopal, Ramesh Sankaranarayanan, and Param Vir Singh. Blog, Blogger, and the Firm: Can Negative Posts by Employees Lead to Positive Outcomes.
(a) Lynn Turner and Lewis Glass, "Blogging Employees Can Help Their Firms—By Dumping on Them" May, 2007, Ideablog.
(b) "Moderate corporate self-criticism increase readership, reputation, study says" Published: Thursday, Nov. 17, 2011 3:51 p.m. MST, Desert News.
(c) "Surprise! Going Negative Might Be Good for Business Blogging" by Steve Woods., November 16, 2011, Technoratti Media.
(d) "Negative Blog Posts Can Have Positive Impact on Business" November 16, 2011 09:01 AM Eastern Time, Business Wire. Yahoo Finance, Reuters, finanznachrichten, streetinsider, Dailyfinance,Boston.com, Investorpoint.com,
(e) "Even negative blogs have a positive impact" Nov 16, 2011, http://www.adigaskell.org.
(f) "The Positive Side of Negative Employee Blogs" November 17, 2011 by Jeanette Mulvey, Business News Daily.
(g) "Negative Employees can be good for business" November 17, 2011, Yahoo News.

Param Vir Singh, Yong Tan, and Vijay Mookerjee. Network Effects: The Influence of Structural Social Capital on Open Source Software Project Success.
(a) Allan Alter, "The Secret of Open source Project Success" April 9, 2008, CIO Insights.

Yan Huang, Param Vir Singh, and Kannan Srinivasan. (2011). Crowdsourcing New Product Ideas under Consumer Learning.
Mentioned by:
(a) "Reducing Crowdsourcing Clutter" February 29, 2012, Peter Llyod, Ideaconnection.com.

(b) "3 Ways to Improve the Ideas You Get from Crowdsourcing" February 13, 2012, Hazel McHugh, Getsponge.com.

(c) "Carnegie Mellon Defends Crowdsourcing" February 2, 2012, Eric Mack, Crowdsourcing.org.

(d) "Listen Up! Two Way Communication Key Lesson in Crowdsourcing" February 6, 2012 Kathy Gill, Wired Pen.

(e) "Studies Refutes Three Major Criticisms of Crowdsourcing" February 3, 2012, Paul A. Ideaconnection.com.

(f) "Crowdsourcing Can Generate Valuable Ideas for Firms" Crowdsourcing.org, Techjournalcouth.com, Niuzer.com, Silobreaker.com, Scoop.it, Congoo.com.

(g) "New CMU Study Shows How Firms Can Successfully Crowdsource High Potential New Product Ideas From Consumers" February 2, 2012, Yahoo Finance, prnewswire, World News, Crowdsourcing.org,

RESEARCH GRANTS AND CONTRACTS

Awarded to Date

Crowdsourcing New Product Ideas
Center For Future of Work
2011-2012 ($25000)
Role: Principal Co-Investigator

Social Networks and Knowledge Transfer
Center for Future of Work
2010-2011 ($10000)
Role: Principal Investigator

Developer Learning Dynamics in Open Source Software Projects
Center for Organizational Learning, Innovation, and Performance, Carnegie Mellon University
2008-09 ($5000)
Role: Principal Investigator
(with Yong Tan, Foster School of Business, University of Washington, and Nara Youn, Tippie School of Business, University of Iowa)

Determinants of Open Source Software Licensing Choice: A Social Influence Perspective
Berkman Faculty Development
2009-10 ($4000)
Role: Principal Investigator

PROFESSIONAL ACTIVITIES

Invited talks at Conference/Symposium

Collaboration Software Development and the Small World Phenomenon, *Informs Annual Meeting*, 2007, *Seattle*, Washington.

Conference talks after critical review prior to presentation

Modeling Blog Reading Dynamics. *Utah IS Winter Conference*, 2010, Salt Lake City, Utah.

Forbidden to Simmelian Ties: Dynamics of Expertise Sharing Communities. ***Workshop on Information in Networks***, 2009, New York City, New York.

Open Source Software and the Small World Phenomenon: An Empirical Investigation of Macro Level Network Properties on Project Success, ***International Conference on Information Systems*** (ICIS), 2007, Montreal, Canada.

Social Capital, Structural Holes and Team Composition: Collaborative Networks of the Open Source Software Community, ***International Conference on Information Systems*** (ICIS), 2007, Montreal, Canada.

Determinants of Open Source Software Development License Choice: A Social Influence Perspective, ***Workshop on Information Systems and Economics*** (WISE), 2007, Montreal, Canada.

Planning to First Release: A Conditional Hazard Function Approach for Investigating Open Source Software Development Time, ***Workshop on Information Technology and Systems*** (WITS), 2006, Milwaukee, Wisconsin, pp 127-133

Stability and Efficiency of Communications Networks in Open Source Software Development, ***Workshop on Information Technology and Systems*** (WITS), 2005, Las Vegas, Nevada, pp 177-182.

Seminars at other academic institutions

Research Seminar at Smith School of Business, University of Maryland, College Park, November 2011.

Research Seminar at Krannert School of Business, Purdue University, March 2011.

Research Seminar at Information and Decision Sciences Department, Carlson School of Management, University of Minnesota, Minneapolis, (October 24, 2008).

Research Seminar at Decisions, Operations, and Information Technology Department, Katz School of Business, University of Pittsburgh, Pittsburgh, Pennsylvania, (November 13, 2009).

Awards, Prizes, Honors

Runner up to *Best Published Paper* for 2011 for *Information Systems Research*

Carnegie Bosch Institute Junior Chair, AY 2012-15

Faculty Giving Chair, AY 2011-2012

America's Winner of Google Online Marketing Challenge, 2009-10.

Awarded $5000 research grant by the Center for organizational learning, innovation and performance, Carnegie Mellon university, 2008.

Awarded Dean's Achievement Award 2005-2006.

Participant at Doctoral Consortium, Center for International Business Education and Research, Seattle, Washington, 2005.

Awarded University of Washington Graduate School Top Scholar Award (2004-2005)

Foster Endowed Fellowship dissertation funding, 2007 and 2008.

Nominated for University of Washington Business School Instructor of the Quarter award, Winter 2007.

Best Paper Nomination for AMCIS, Tampa, Florida, 2003.

EDITORIAL ROLES

Associate Editor: International Conference on Information Systems, 2011, Shanghai, China. International Conference on Information Systems, 2012, Orlando, Florida.

Ad Hoc Referee for Management Science, Review of Economics and Statistics, Information Systems Research, Management Information Systems Quarterly, Journal of Management Information Systems, ACM Transactions on Software Engineering and Methodology, International Conference on Information Systems., Conference on Information Systems and Technology, Workshop on Information Systems and Technology.

SERVICE

Tepper School of Business

Coordinator, Information Systems Seminar Series (2008-09)

Coordinator, Information Systems Seminar Series (2009-10)

Coordinator, Information Systems Seminar Series (2010-11)

Member, Information Systems Faculty Search Committee (2008-09)

Member, Information Systems Faculty Search Committee (2010-11)

Undergraduate Coordinator for Information Systems (2010-12)

Member, Information Systems Faculty Search Committee (2011-12)

Conference Chair

Informs Annual Meeting, Information Systems Cluster Chair, 2011, Charlotte, NC.

Conference on Information Systems and Technology, 2012, Phoenix, Arizona.

Workshop on Information Systems and Economics, 2012, Orlando, Florida.

Conference Program Committee Member

Conference on Information Systems and Technology, 2009, San Diego, California.

Conference on Information Systems and Technology, 2010, Austin, Texas.

Conference on Information Systems and Technology, 2011, Charlotte, NC.

ACM Conference on Electronic Commerce, 2009, Stanford, California.

ACM Conference on Electronic Commerce, 2011, San Jose, California.

ACM Conference on Electronic Commerce, 2012, Valencia, Spain.

Conference Session Chair

CORS-INFORMS, 2009, Toronto, Canada.

Informs Annual Meeting, 2009, San Diego, CA.

Informs Annual Meeting, 2010, Austin, TX.

Conference on Information Systems and Technology, 2010, Austin, TX.

Conference on Information Systems and Technology, 2011, Charlotte, NC.

Conference Discussant

International Conference on Information Systems, 2008, Paris, France.

International Conference on Information Systems, 2010, Saint Louis, Missouri.

Conference on Information Systems and Technology, 2009, San Diego, California.

Conference on Information Systems and Technology, 2010, Austin, TX.

STUDENT SUPERVISION

Doctoral Student Supervision (at Carnegie Mellon)

Yingda Lu, advising jointly with Kinshuk Jerath for a research paper, "The Emergence of Opinion Leaders in Online Review Communities."

Yingda Lu, advising jointly with Baohong Sun for a research paper, "Learning from Peers on Social Media Platforms: A Dynamic Structural Model."

Yan Huang, advising jointly with Anindya Ghose for a research paper, "Show Me the Incentives: A Dynamic Structural Model of Enterprise Blogging."

Yan Huang, advising jointly with Kannan Srinivasan for a research paper, "Crowdsourcing New Product Ideas under Consumer Learning"

Liye Ma, advising jointly with Michael Smith and Alan Montgomery for a research paper, "No Meaningful Impact: The Impact of Pre-release Piracy on Box Office Sales."

Elina Hwang, advising jointly with Linda Argote for a research paper," Learning to Cross Boundaries in Online Knowledge Communities: Fading of Surface-level and Rise of Deep-level Similarity with Experience."

Quan Wang, advising jointly with Anindya Ghose for a research paper, " Modeling Attribution, Interdependencies, and Optimal Marketing-Mix in Multichannel Environments."

OTHER EDUCATIONAL CONTRIBUTIONS (at CARNEGIE MELLON)

Courses Taught

45-877 Strategic Uses of Information Technology (A3-10, M3-10, A4-11, M4-10, E5-11, M3-12, M4-12)
        (Completely redesigned, developed and taught)
70-453 System Analysis and Design (SP-08, SP-09)
70-455 Information Resource Management (SP-08, SP-09, SP-10)
45-890 Doctoral Seminar in Information Systems (A1-09, A1-10)
70-443 Digital Marketing and Social Media Strategy (SP 12)
70-339 IT for Finance (A4-12)